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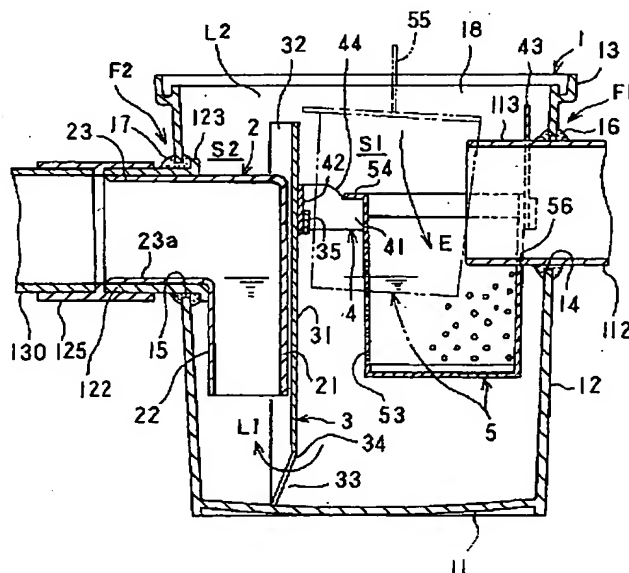
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(54) 【発明の名称】 雑排水用排水枥

(57) 【要約】

【目的】 固形物（野菜屑など）分離、油分離、臭気水封の各機能を有する雑排水用排水枥において、機能を発揮させるために用いる複数の部材の着脱操作を簡単に行う。

【構成】 排水流入部 F 1 とそれより下位の排水流出部 F 2 とを有する枥本体 1 に対し、その上面開口を通じて、油分離板 3 と、連通路 L 2 の遮蔽手段（短管）2 と、支持枠体 4 と、支持枠体 4 により支持可能な固形物分離用の籠体 5 と、を着脱可能とする。流入管 1 1 2 から流れ込んだ雑排水に混ざっている野菜屑や毛髪を籠体 5 で捕集する。籠体 5 を通過した水が油分離の後、迂回路 L 1 を通り、短管 2 を経て流出する。短管 2 の内部の溜り水で臭気を水封する。



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## 【特許請求の範囲】

【請求項 1】 排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有底の樹本体と、樹本体の上面開口を通して樹本体に出し入れ可能で、間隔を隔てた一対のアーム部とこのアーム部の先端部に設けられて樹本体の排水流入部からその内部空間に突き出された流入管の突出部に上面に係脱可能な門形の吊持杆部とを有し少なくとも上記吊持杆部を上記流入管の突出部に吊持させて樹本体の内部空間に配備される支持枠体と、

樹本体の上面開口を通してその内部空間に配備された上記支持枠体の一対のアーム部の相互間に挿抜可能でその支持枠体によって吊持可能であり、周囲壁上端部の一箇所に、上記流入管の突出部にその突出部の下面に沿う方向で嵌脱可能な凹入部が具備され、上記支持枠体によって吊持させると共に上記凹入部を上記突出部に嵌合することによって上記流入管から流入する雑排水の受入れ姿勢となる通水性を備えた固形物分離用の籠体と、を備えることを特徴とする雑排水用排水樹。

【請求項 2】 排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有底の樹本体と、樹本体の上面開口を通してこの樹本体に出し入れ可能で、樹本体の内部で離脱可能に固定されてその内部空間を上記排水流入部側の一次空間と排水流出部側の二次空間とに区画すると共に、下端部に排水の迂回路となる開口を備える油分離板と、

樹本体の上面開口を通してこの樹本体に出し入れ可能で、上記油分離板によって区画された一次空間と二次空間とを油分離板の上部で連通する連通路を遮蔽する遮蔽手段と、

樹本体の上面開口を通して上記一次空間に出し入れ可能で、間隔を隔てた一対のアーム部とこのアーム部の先端部に設けられて樹本体の排水流入部から上記一次空間に突き出された流入管の突出部の上面に係脱可能な門形の吊持杆部とを有し少なくとも上記吊持杆部を上記流入管の突出部に吊持させて樹本体の内部空間に配備される支持枠体と、

樹本体の上面開口を通してその内部空間に配備された上記支持枠体の一対のアーム部の相互間に挿抜可能でその支持枠体によって吊持可能であり、周囲壁上端部の一箇所に、上記流入管の突出部にその突出部の下面に沿う方向で嵌脱可能な凹入部が具備され、上記支持枠体によって吊持させると共に上記凹入部を上記突出部に嵌合することによって上記流入管から流入する雑排水の受入れ姿勢となる通水性を備えた固形物分離用の籠体と、を備えることを特徴とする雑排水用排水樹。

【請求項 3】 支持枠体が一対のアーム部の基端部相互間に亘る連結杆部を備えると共に、油分離板の板面に係合具が設けられ、樹本体の内部で固定されたこの油分離板の上記係合具に、支持枠体の上記連結杆部が上下方向

で係脱可能となされている請求項 2 記載の雑排水用排水樹。

【請求項 4】 排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有底の樹本体と、樹本体の上面開口を通してこの樹本体に出し入れ可能で、樹本体の内部で離脱可能に固定されてその内部空間を上記排水流入部側の一次空間と排水流出部側の二次空間とに区画すると共に、下端部に排水の迂回路となる開口を備える油分離板と、

10 樹本体の上面開口を通してこの樹本体に出し入れ可能で、上記油分離板によって区画された一次空間と二次空間とを油分離板の上部で連通する連通路を遮蔽する遮蔽手段と、

樹本体の上面開口を通して上記一次空間に出し入れ可能で、上記一次空間に排水流入部から突き出された流入管の突出部に離脱可能に取り付けられる通水性を備えた固形物分離用の可撓性袋体と、を備えることを特徴とする雑排水用排水樹。

【請求項 5】 遮蔽手段が、樹本体の上面開口を通してこの樹本体に出し入れ可能で、一端部が排水流出部に接続され他端部が油分離板によって区画された二次空間内においてその油分離板の開口の上縁と排水流出部の出口下縁との間の高さ位置で下向きに配備される L 形の短管でなる請求項 2、請求項 3、請求項 4 のいずれかに記載の雑排水用排水樹。

【請求項 6】 遮蔽手段が、油分離板に設けられてこの油分離板によって区画された二次空間をその上部で塞ぐ閉塞板部でなる請求項 2、請求項 3、請求項 4 のいずれかに記載の雑排水用排水樹。

30 【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は、雑排水用排水樹、特に雑排水に混ざっている野菜屑や毛髪などの固形物の分離機能のほかに、雑排水中の油の分離機能や下流側臭気の水封機能を備えた雑排水用排水樹に関する。

【0002】

【従来の技術】宅地内に埋設して設置される雑排水用排水樹において、一般的には、雑排水と共に流入してくる野菜屑や毛髪などの固形物を分離する機能を付与したものでは、流入管の出口側端部に臨ませた網籠で固形物を受け止め、排水を網籠の網目を通過させるという方式が採用されている。また、雑排水中の油の分離機能を付与したものでは、排水樹の内部に油分離板を配備し、この油分離板の下端部に具備させた開口を通して雑排水を迂回させるという方式が採用されている。さらに、下流側臭気の水封機能を付与したものでは、排水樹の内部に水封板を設置し、この水封板によって排水樹の内部空間を上流側空間と下流側空間とに区画し、かつ下流側空間を上流側空間に対して密閉した状態に保つという方式が採用されている。

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【0003】ところで、雑排水用排水桝はその設置スペースとの関係でできるだけ小さいものであることが望ましい。また、固形物分離機能を備えた排水桝や、固形物分離機能と油分離機能と臭気水封機能の3つの機能を併せ持った排水桝などにおいては、網籠で捕集した固形物を廃棄したり、網籠や油分離板や水封板などを洗浄したり、排水桝の内部を清掃したりすることが必要であるので、網籠や油分離板、水封板などをすべて排水桝から簡単な操作で容易に取り出し得るようになっていることが望ましい。

【0004】

【発明が解決しようとする課題】しかしながら、上記したように、排水桝はその設置スペースとの関係でその口径や大きさを余り大きくすることができない場合が多い。そのため、固形物分離機能を備えた排水桝や、固形物分離機能と油分離機能と臭気水封機能の3つの機能を併せ持った従来の雑排水用排水桝においては、網籠の出し入れや、油分離板、水封板などの出し入れを容易に行うことができないこともあり、必ずしも上記の要望を満足し得るものではなかった。

【0005】本発明は以上の状況に鑑みてなされたものであり、固形物分離に用いる網籠などの部材、油分離板、臭気の水封に用いる部材などの桝本体への組付け構造に工夫を講じることによって、排水桝の内部空間が狭くても、上記の網籠などの部材、油分離板、臭気の水封に用いる部材などを簡単な操作で容易に桝本体に出し入れして着脱することができ、しかも固形物分離、油分離、臭気水封などの各機能を確実に発揮させることのできる雑排水用排水桝を提供することを目的とする。

【0006】

【課題を解決するための手段】請求項1に記載した構成に係る雑排水用排水桝は、排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有底の桝本体と、桝本体の上面開口を通して桝本体に出し入れ可能で、間隔を隔てた一対のアーム部とこのアーム部の先端部に設けられて桝本体の排水流入部からその内部空間に突き出された流入管の突出部の上面に係脱可能な門形の吊持杆部とを有し少なくとも上記吊持杆部を上記流入管の突出部に吊持させて桝本体の内部空間に配備される支持枠体と、桝本体の上面開口を通してその内部空間に配備された上記支持枠体の一対のアーム部の相互間に挿抜可能でその支持枠体によって吊持可能であり、周囲壁上端部の一箇所に、上記流入管の突出部にその突出部の下面に沿う方向で嵌脱可能な凹入部が具備され、上記支持枠体によって吊持させると共に上記凹入部を上記突出部に嵌合することによって上記流入管から流入する雑排水の受入れ姿勢となる通水性を備えた固形物分離用の籠体と、を備える、というものである。請求項2に記載した構成に係る雑排水用排水桝は、排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有

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底の桝本体と、桝本体の上面開口を通してこの桝本体に出し入れ可能で、桝本体の内部で離脱可能に固定されてその内部空間を上記排水流入部側の一次空間と排水流出部側の二次空間とに区画すると共に、下端部に排水の迂回路となる開口を備える油分離板と、桝本体の上面開口を通してこの桝本体に出し入れ可能で、上記油分離板によって区画された一次空間と二次空間とを油分離板の上部で連通する連通路を遮蔽する遮蔽手段と、桝本体の上面開口を通して上記一次空間に出し入れ可能で、間隔を隔てた一対のアーム部とこのアーム部の先端部に設けられて桝本体の排水流入部から上記一次空間に突き出された流入管の突出部の上面に係脱可能な門形の吊持杆部とを有し少なくとも上記吊持杆部を上記流入管の突出部に吊持させて桝本体の内部空間に配備される支持枠体と、桝本体の上面開口を通してその内部空間に配備された上記支持枠体の一対のアーム部の相互間に挿抜可能でその支持枠体によって吊持可能であり、周囲壁上端部の一箇所に、上記流入管の突出部にその突出部の下面に沿う方向で嵌脱可能な凹入部が具備され、上記支持枠体によって吊持させると共に上記凹入部を上記突出部に嵌合することによって上記流入管から流入する雑排水の受入れ姿勢となる通水性を備えた固形物分離用の籠体と、を備える、というものである。

【0007】請求項2に記載した構成に係る排水用排水桝においては、請求項3に記載したように、支持枠体が一対のアーム部の基端部相互間に亘る連結杆部を備えると共に、油分離板の板面に係合具が設けられ、桝本体の内部で固定されたこの油分離板の上記係合具に、支持枠体の上記連結杆部が上下方向で係脱可能となされている、という構成を採用することができる。

【0008】請求項4に記載した構成に係る雑排水用排水桝は、排水流入部とその排水流入部よりも下位の排水流出部とが胴壁に設けられた有底の桝本体と、桝本体の上面開口を通してこの桝本体に出し入れ可能で、桝本体の内部で離脱可能に固定されてその内部空間を上記排水流入部側の一次空間と排水流出部側の二次空間とに区画すると共に、下端部に排水の迂回路となる開口を備える油分離板と、桝本体の上面開口を通してこの桝本体に出し入れ可能で、上記油分離板によって区画された一次空間と二次空間とを油分離板の上部で連通する連通路を遮蔽する遮蔽手段と、桝本体の上面開口を通して上記一次空間に出し入れ可能で、上記一次空間に排水流入部から突き出された流入管の突出部に離脱可能に取り付けられる通水性を備えた固形物分離用の可撓性袋体と、を備える、というものである。

【0009】請求項2、請求項3または請求項4に記載した構成に係る雑排水用排水桝においては、請求項5に記載したように、遮蔽手段が、桝本体の上面開口を通してこの桝本体に出し入れ可能で、一端部が排水流出部に接続され他端部が油分離板によって区画された二次空間

内においてその油分離板の開口の上縁と排水流出部の出口下縁との間の高さ位置で下向きに配備されるL形の短管でなる、という構成を採用することが可能であり、また、請求項6に記載したように、遮蔽手段が、油分離板に設けられてこの油分離板によって区画された二次空間をその上部で塞ぐ閉塞板部でなる、という構成を採用することも可能である。

#### 【0010】

【作用】請求項1に記載した構成に係る雑排水用排水桝においては、支持枠体や籠体を桝本体にその上面開口を通して出し入れ可能であり、しかも支持枠体をその門形の吊持杆部を利用して流入管の突出部の上面に係合させて桝本体の内部空間に配備することが可能であり、その支持枠体の一對のアーム部の相互間に上から挿入した籠体を流入管の突出部の下面に沿う方向で動かすことによって、その籠体の凹入部を上記突出部に嵌合させて雑排水の受入れ姿勢とすることが可能であるので、支持枠体や籠体を簡単な操作で容易に桝本体に装着することができる。支持枠体や籠体を桝本体から取り出すときには、上記した手順と逆の手順を行えばよい。

【0011】請求項2に記載した構成に係る雑排水用排水桝においては、上述したところと同じ手順で支持枠体や籠体を桝本体に出し入れしたり着脱したりすることができる。また、油分離板や遮蔽手段は桝本体の上面開口を通して桝本体に出し入れ可能であり、支持枠体や籠体は桝本体の上面開口を通して油分離板によって区画された一次空間に出し入れ可能であり、油分離板が桝本体の内部で離脱可能に固定される構成になっており、支持枠体が上記一次空間内で離脱可能に固定される構成になっており、籠体上記支持枠体によって引上げ可能に吊持される構成になっているので、油分離板や遮蔽手段、支持枠体、籠体などを簡単な操作で容易に桝本体に出し入れしたり、桝本体に着脱したりすることができる。

【0012】そして、支持枠体や籠体が請求項3に記載したように構成されていると、桝本体側に支持枠体を固定するために特別な留め具を設ける必要がない。

【0013】請求項4に記載した構成に係る雑排水用排水桝においては、桝本体の内部に、遮蔽手段と、油分離板と、この油分離板により区画された一次空間に突き出た流入管の突出部に取り付けられる可撓性袋体とを設けるだけであるので、当該排水桝を小さくしやすい。

【0014】以上のように構成された本発明に係る各雑排水用排水桝においては、籠体または袋体によって雑排水と共に流入してくる野菜屑や毛髪などの固形物が捕集され、雑排水に混ざっている油分は水との比重差により分離されて一次空間の溜まり水の表面に浮かぶので下流側に流れてしまうという事態が起こらない。また、L形の短管または油分離板に設けられた閉塞板部によって一次空間と二次空間とを油分離板の上部で連通する連通路が遮られるので、桝本体の溜まり水により下流側の臭気

が水封され、その臭気が上流側に逆流するという事態が起こらない。

#### 【0015】

【実施例】図1は本発明の実施例による雑排水用排水桝の断面図、図2は同排水桝の平面図、図3～図6は図1の排水桝に用いられている部材の概略斜視図である。

【0016】桝本体1はポリプロピレンやポリ塩化ビニルなどの合成樹脂で成形されており、底壁11とやゝ上拡がり形状の胴壁12と環状の溝部13とを一体に備え、溝部13が、桝本体1に積み上げられる埋設深さ調節用の筒状アジャスタ（不図示）の嵌合溝として使われたり、蓋体（不図示）を装着するための蓋受け溝として使われたりする。この桝本体1は地中に埋設して設置される。また、上記胴壁12には、上流側配管や下流側配管の埋設深さに合わせて円形の開口14、15が異なる2箇所に開設され、これらの開口14、15の各口縁部にシール材16、17が装着されている。

【0017】そして、シール材16の装着された上記開口14によって排水流入部F1が形成されている。排水流入部F1には、上流側配管の終端部を形成する流入管112が接続されている。流入管112は、桝本体1の胴壁12との接続を確実にするためや伸縮や変形などが生じても桝本体1の胴壁12から抜けないようにするために桝本体1の内部空間に少し突出されており、その突出部を符号113で示してある。

【0018】また、シール材17の装着された上記開口15と、シール材17を介して開口15に気密に差し込まれた接続管122と、この接続管122に接続された後述する短管2とによって排水流出部F2が形成されている。上記接続管122はその一端部に具備された鏝部123が上記シール材17に当たる位置まで桝本体1の内方から外方に向けて差し込まれている。この接続管122は桝本体1の上面開口18を通じてその桝本体1の中に入れ、その状態からシール材17を介して開口15に引抜き可能に差し込んであって、こうして開口15に差し込まれた接続管122は排水流出部F2から引き抜いて取り出すことも可能である。ここで、排水流出部F2は排水流入部F1よりも少し下位に配備されていると共に、桝本体1の内部空間における排水流出部F2よりも下位の部分には十分な深さが確保されている。

【0019】2はL形の短管であり、ポリ塩化ビニルやポリエチレンなどの合成樹脂で成形されている。図6のように、この短管2は、桝本体1の胴壁12の内面に沿うように湾曲した前壁部22を有しかつ下面が開放した略四角筒状の立下り筒部21とこの立下り筒部21における前壁部22の上端中央部から突出された管状の接続筒部23とを備えている。そして、この短管2は、桝本体1の上面開口18を通じて桝本体1の中に入れてから、その接続筒部23（すなわち短管2の一端部）が上記接続管122に気密に差し込まれている。したがっ

て、この短管2は接続筒部23を上記接続管122から引き抜いて樹本体1の上面開口18を通じて取り出すことも可能である。

【0020】3は油分離板である。図4に示したように、油分離板3は、背高の平板部31とこの平板部31の両側にそれぞれ屈曲して形成された幅狭の斜板部32、32とを一体に有していると共に、平板部31の下端部全体および斜板部32、32の下端部の一部とを欠除させることにより形成された凹入状の開口33を有している。この油分離板3は樹本体1の上面開口を通してこの樹本体1に挿入されていると共に、図2に示したように、樹本体1における胴壁12（図1参照）の周方向の適所に設けられた係合突起19…の相互間に上記斜板部32、32の端縁を嵌合して係合させることによって樹本体1の内部で固定されている。こうして樹本体1の内部で固定された油分離板3は、樹本体1の内部空間を排水流入部F1側の一次空間S1と排水流出部F2側の二次空間S2とに区画すると共に、下端部の開口33が一次空間S1と二次空間S2とを連通する迂回路（矢印L1で示してある）を形成する。この油分離板3は上方に引き上げるることによって上記係合突起19…から離脱されるので、そのまま上方に持ち上げれば樹本体1の上面開口18を通じて外部に取り出すことが可能である。

【0021】上記した短管2においては、その立下り筒部21の開放されている下端部（すなわち短管2の他端部）が上記二次空間S2内において油分離板3の開口33の上縁34と排水流出部F2の出口下縁（この実施例では短管2における接続筒部23の最低位部23a）との間の高さ位置で下向きに配備されている。

【0022】図1や図4に示したように、油分離板3における平板部31の板面の先端近傍箇所に略U字形ないしJ字形の係合具35が固着されている。

【0023】4は支持枠体である。図3に示すように、この支持枠体4は、間隔を隔てた一对の平行な板片状のアーム部41、41とこれらのアーム部41、41の基端部相互間に亘る板片状の連結杆部42と一对の上記アーム部41、41の先端部相互間に亘るように立ち上げられた門形の吊持杆部43とを備えており、吊持杆部43の内周縁43aは逆U字形になっている。この実施例では、アーム部41、41と連結杆部42とが直角になっているけれども、これら両者をU字形にしてもよい。この支持枠体4は、樹本体1の上面開口18を通して上記一次空間S1に入れられ、その連結杆部42が油分離板3に固着されている上記係合具35に係合され、また、門形の吊持杆部43が、排水流入部F1から突き出された流入管112の突出部113の上面に嵌合状に係止されている。このような支持枠体4は、上方に引き上げることによって連結杆部42を係合具35から外すと同時に、門形の吊持杆部43を上記流入管112の突出部113から引き上げることによって取り外すことがで

き、そのまま樹本体1の上面開口18を通じて外部に取り出すことが可能である。

【0024】5は籠体である。この籠体5はステンレスで作られた骨格51、52にステンレス製の孔空き板やステンレス製のネットなどの通水性を有する部材を張って箱形に構成された箱形の固形物捕集容器53と、この容器53の上端部の3辺に設けられたフランジ部54と、把手55とを備えている。そして、容器53のフランジのない1つの側面の先端部には円弧状の凹入部56が具備されている。この籠体5は、図1に仮想線で示したように樹本体1の上面開口18から入れられた後、矢印Eで示すように、容器53を支持枠体4の一对のアーム部41、41の間に傾けながら挿入した後、フランジ部54をアーム部41、41の上で流入管112の突出部113の下面に沿う方向に滑らせて凹入部56をその突出部113の下面に嵌合される。これにより、フランジ部54が支持枠体4の一对のアーム部41、41に載架されて籠体5が支持枠体4により吊持されて籠体5が排水流入部F1に臨み、雑排水の受入れ姿勢となる。このようにすると、樹本体1の内部空間または一次空間S1が狭くても無理無く籠体5を樹本体1に入れて設置することができる。この籠体5は把手55を手で持ち、その凹所56を上記流入管112の突出部113から外して引き上げることにより支持枠体4から離脱され、そのまま樹本体1の上面開口18を通じて取り出すことが可能である。

【0025】この実施例において、支持枠体4の一对のアーム部41、41の基部には上向きに突き出た段部44が設けられており、アーム部41、41に載架された籠体5のフランジ部54がこの段部44に引っ掛かるようになっている。このため、籠体5に固形物の混ざった雑排水が流下してもその籠体5が後退することなく、雑排水は籠体5内に必ず流入する。

【0026】以上のように構成された雑排水用排水樹において、流入管112から流入してきた雑排水は、籠体5の中に入った後、それに混ざっている野菜屑や毛髪などの固形物が籠体5の固形物捕集容器53に捕集される一方、水はその容器53を通過して一次空間S1に流入する。そして、一次空間S1に水が流入し続けると、その水が油分離板3の開口33により形成されている迂回路L1を通過して二次空間S2に入り、その水位が次第に上昇する。そして、二次空間S2の水位が排水流出部F2の出口下縁（短管2における接続筒部23の最低位部23a）よりも高くなると、その水が下流側に接続されている流出管130を通過して二次空間S2の水位が排水流出部F2の出口下縁よりも下がるまで流出する。二次空間S2の水位が排水流出部F2の出口下縁よりも下がって水の流出が止まった状態では、短管2の立下り筒部21の中に水が溜まったままになる。このため、短管2の内部空間が密閉空間となる。言い換えると、短管2

の立下り筒部 21 が二次空間 S2 の水中に没していることにより、一次空間 S1 と二次空間 S2 とを油分離板 3 の上部で連通する連通路 L2 が遮断される。したがって、この実施例においては、短管 2 が油分離板 3 の上部の上記連通路 L2 を遮る遮蔽手段として役立っている。そして、下流側の臭気は短管 2 の内部で水封され、その臭気が一次空間 S1 や二次空間 S2 や流入管 112 を経て逆流することがない。

【0027】また、流入管 112 から流入した雑排水に混ざっている油分は、水との比重差により水面に浮き上がる。このため、油分は油分離板 3 により遮蔽されて一次空間 S1 側で水面に浮かんで分離され、二次空間 S2 側に流入することはない。

【0028】籠体 5 によって捕集した固形物は籠体 5 を枳本体 1 の上面開口 18 を通じて外部に引き上げた後、処理される。また、籠体 5、支持枠体 4、油分離板 3、短管 2、接続管 122 などは、この順に次々と取り外して枳本体 1 の上面開口 18 から外部に取り出すことができるので、そのようにしてそれらを水洗することが可能である。また、上掲した籠体 5 などを全て取り外して枳

本体 1 を清掃することも可能である。  
【0029】このような雑排水用排水枳においては、その内部空間における胴壁 112 の一侧に流入管 112 の突出部 113 が突き出て胴壁 12 とその流入管 112 との接続信頼性を高めてあるのに対し、その突出部 113 の反対側に油分離板 3 などが固定されているので、籠体 5 を突出部 113 の下方にまで挿入するのに必要な空間が狭く、さらに支持枠体 4 を固定するのに必要な空間も狭くなっているけれども、上記したように、支持枠体 4 に門形の吊持杆部 43 を設けてその吊持杆部 43 を流入

管 112 の突出部 113 で吊持させ、籠体 5 に凹入部 56 を設けてその凹入部 56 を突出部 113 にじゃまされずに嵌合（挿入）することができるようにし、しかも凹入部 56 を突出部 113 に嵌合（挿入）したときには突出部 113 の端部が籠体 5 の中央に位置するようにしたので、枳本体 1 の内部空間が狭くても支持枠体 4 や籠体 5 を容易に出し入れすることが可能になった。

【0030】ところで、この実施例においては、油分離板 3 とは別に短管 2 を設けることにより、下流側臭気の水封機能を短管 2 に担わせ、油分離機能を油分離板 3 に担わせてある。このようにしておくことは、たとえば地域条例などにより水封機能を担う短管 2 の立下り筒部 22 の水没深さが一定の深さよりも少ない範囲に定められており、しかもそのように定められた水没深さでは十分な油分離機能が發揮されないような場合に有益である。

【0031】図 7 は他の実施例を示している。この実施例では、油分離板 3 の上端部に閉塞板部 37 を設け、この閉塞板部 37 の端縁 37a を枳本体 1 における胴壁 12 の内面に気密に接触させてある。このようにしておく

が閉塞板部 37 で塞がれるので、下流側臭気が一次空間 S1 側に逆流することがない。このため、油分離板 3 が油分離機能のみならず、臭気の水封機能をも發揮することになり、図 1 などで説明した L 形の短管 2 は不要である。したがって、この実施例では、シール材 17 が装着された開口 15 にソケット 123 を差し込み、このソケット 123 に継手 125 を介し流出管 130 を接続してある。その他の構成や作用は図 1 などを参照して上述したところと同様であるので、図 7 では、図 1～図 6 で説明した部分ないし部材と同一または相応する部分または部材に同一符号を付して詳細な説明を省略する。

【0032】図 8 は支持枠体 4 の変形例を示している。この支持枠体 4 は間隔を隔てた一対のアーム部 41、41 の基端部のそれぞれに立上り杆部 45、45 を立ち上げ、これらの立上り杆部 45、45 の上端部相互間に横杆 46 を横架し、この横杆 46 の両端部のそれぞれに係合片 47、47 を下向きに設けたものであり、補強用の連結杆部 42 が必要に応じて設けられる。なお、横杆 46 を省略し、立上り杆部 45、45 の上端に係合片を曲成するようにしてもよい。このほかの構成は図 3 で説明した支持枠体 4 と同じであるので、同一部分に同一符号を付してある。

【0033】このような支持枠体 4 においても、枳本体 1 の上面開口 18 を通して出し入れ可能である。そして、たとえば図 9 のように、枳本体 1 の上面開口 18 を通して上記一次空間 S1 に入れられた支持枠体 4 の係合片 47、47 が枳本体 1 側の環状の溝部 13 を形成している内側縁部 13a に係止され、また、門形の吊持杆部 43 が流入管 112 の突出部 113 の上面に嵌合状に係止される。こうして支持枠体 4 を設置しておく、係合片 47、47 が円形の上記内側縁部 13a に係止されているので、流入管 112 から流入する雑排水で籠体 5 が後方へ押されたりしても、支持枠体 4 が前後（図 9 の左右方向）に動くことはない。

【0034】このような支持枠体 4 は、上方に引き上げることによって係合片 47、47 を溝部 13 の内側縁部 13a から外すと同時に、門形の吊持杆部 43 を上記流入管 112 の突出部 113 から引き上げることによって取り外すことができ、そのまま枳本体 1 の上面開口 18 を通じて外部に取り出すことが可能である。この支持枠体 4 を用いることによって、油分離板 3 に係合具 35 を設けることが不要になる。この支持枠体 4 を図 1 で説明したような雑排水用排水枳に用いることも可能である。支持枠体 4 に籠体 5 を吊持させるための手順やその籠体 5 を支持枠体 4 から引き上げて枳本体 1 の外に取り出す手順などについては図 1 や図 7 で説明したところと同様である。図 9 では、図 7 で説明した部分ないし部材と同一または相応する部分または部材に同一符号を付して詳細な説明を省略する。

【0035】図 10 は別の発明に係る実施例の雑排水用



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排水樹の断面図である。この実施例では、図1～図7、図8、図9などで説明した支持枠体4や係合具35が不要であり、また、図1などで説明した籠体5に代えて、樹本体1の上面開口18を通して一次空間S1に出し入れ可能で、上記一次空間S1に排水流入部F1から突き出された流入管112の突出部113に離脱可能に取り付けられる通水性を備えた固形物分離用の可撓性袋体6が用いられる。袋体6は、焼却によって有毒ガスを発生しない素材、たとえばポリオレフィン系の合成樹脂（ポリプロピレンなど）で作られたものを好適に使用することができる。

【0036】この実施例においては、袋体6の口部61に矩形のフランジ63を備えた筒体62が取り付けられている。また、図11に示したように、上記流入管112の突出部113の端部に矩形のフランジ114が設けられている。このフランジ114は、下辺と左右の両側辺に係合片115…を備えており、上記筒体62のフランジ63をこれらの係合片115…に上方から差し込むと、フランジ63、114同士が重なりあって筒体62が流入管112に連通する。したがって、フランジ63を袋体6と共に引き上げると、そのフランジ63がその相手方であるフランジ115から離脱される。

【0037】このように構成された雑排水用排水樹では、流入管112から流入してきた雑排水は、袋体6の中に入った後、それに混ざっている野菜屑や毛髪などの固形物が袋体6に捕集される一方、水はその袋体6を通過して一次空間S1に流入し、その水が油分離板3の開口33により形成されている迂回路L1を通過して二次空間S2に入り、下流側に接続されている流出管130を通過して流出する。このため、図7などで説明したものと同様に、固形物の分離機能と油分離機能と臭気の水封機能とが発揮される。固形物を捕集した袋体6は、樹本体1から取り出して固形物と共に焼却できる。なお、図8や図9では、図1～図6で説明した部分ないし部材と同一または相応する部分または部材に同一符号を付して詳細な説明を省略する。また、袋体6とフランジ63とを一体化しておいてもよい。

【0038】図12は流入管112と袋体6の口部61とを接続する構造の他の事例を示している。すなわち、同図のものは、袋体6の口部61をL字形の切欠孔65を備える筒体64に装着しておき、流入管112の突出部113の外周に係合突起116を設けたものである。この事例によると、袋体6の口部61を装着した筒体64を流入管112の突出部113に外嵌した後、少し回転させるという操作を行って、その筒体64の切欠孔65に係合突起116に抜けないように係合させるだけで、袋体6が流入管112の突出部113に接続される。

【0039】ところで、図10で説明した雑排水用排水樹では、流入管112の突出部113に接続した袋体6

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が下方に垂れ下がるので、袋体6の大きさによっては一次空間S1の溜り水に袋体6やそれに捕集されている固形物が漬かったままになる。このような事態を回避するのに有効な雑排水用排水樹を図13に示してある。同図の雑排水用排水樹においては、樹本体1の上面開口18を通して一次空間S1に出し入れ可能な網籠7を上記一次空間S1内に配備し、この網籠7に乗せた袋体6を溜り水の水面よりも上位で支持させてある。より具体的には、網籠7による袋体6の支持位置を、排水流出部F2の出口下縁と排水流入部F1の入口下縁（流入管112の最低位面）との間の高さ位置に定めてある。そして、網籠7を一次空間S1内に配備するための具体的手段として次の対策が講じられている。すなわち、図3で説明した支持枠体4の下面に網を張ったものを網籠7とし、また、油分離板3の平板部31の板面に係合具35を固着し、網籠7の連結杆部（図3で説明した連結杆部42に相当する）を上記係合具35に係合させると共に、門形の吊持杆部（図3で説明した門形の吊持杆部43に相当する）を流入管112の突出部113に嵌合状に係止させてある。このようにしておくと、一次空間S1の溜り水に袋体6や袋体6に捕集されている固形物が漬からないので衛生的である。なお、網籠7として、図8で説明した支持枠体4の下面に網を張ったものを用いることも可能である。

【0040】図13では、図1～図6で説明した部分ないし部材と同一または相応する部分または部材に同一符号を付して詳細な説明を省略する。

【0041】

【発明の効果】本発明に係る雑排水用排水樹によれば、樹本体の内部空間が狭くても、樹本体の内部に設けられる支持枠体や籠体、あるいは樹本体の内部に取り付けられる油分離板や遮蔽手段、支持枠体、籠体（または袋体）などの全部の部材を簡単な操作で容易に樹本体に着脱することができるので、樹本体やそれらの部材を洗浄または清掃したり籠体で捕集した固形物を廃棄したりする作業を容易に行うことが可能になる。それにもかかわらず、固形物の分離機能や油分離機能、下流側臭気の水封機能が確実に発揮されるという効果がある。

【図面の簡単な説明】

【図1】本発明の実施例による雑排水用排水樹の断面図である。

【図2】図1の排水樹の平面図である。

【図3】支持枠体の概略斜視図である。

【図4】油分離板の概略斜視図である。

【図5】籠体の概略斜視図である。

【図6】短管の概略斜視図である。

【図7】他の実施例による雑排水用排水樹の断面図である。

【図8】支持枠体の変形例を示す概略斜視図である。

【図9】図8の支持枠体を用いた雑排水用排水樹の断面

13

図である。

【図 10】別の発明の実施例による雑排水用排水桝の断面図である。

【図 11】流入管と袋体の口部とを接続するためのフランジ付き筒体と流入管側のフランジとを示す概略斜視図である。

【図 12】流入管と袋体の口部とを接続するための他の事例を示す説明図である。

【図 13】別の発明の他の実施例による雑排水用排水桝の断面図である。

【符号の説明】

F 1 排水流入部

F 2 排水流出部

S 1 一次空間

S 2 二次空間

L 1 迂回路

L 2 連通路

1 桝本体

2 短管 (遮蔽手段)

3 油分離板

4 支持枠体

5 籠体

6 袋体

7 網籠

12 胴壁

18 上面開口

33 開口

10 35 係合具

37 閉塞板部 (遮蔽手段)

41 アーム部

42 連結杆部

43 吊持杆部

53 固形物捕集容器

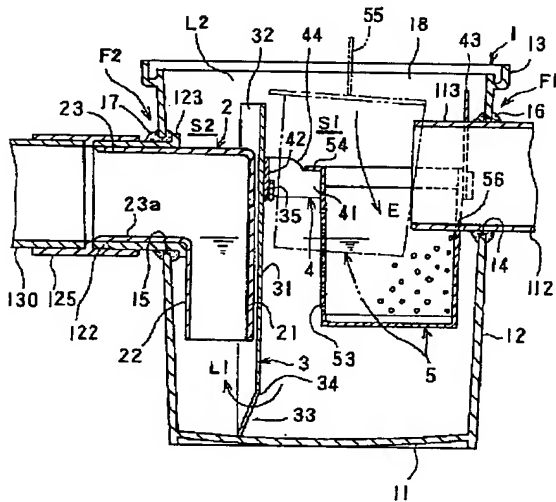
54 フランジ部

112 流入管

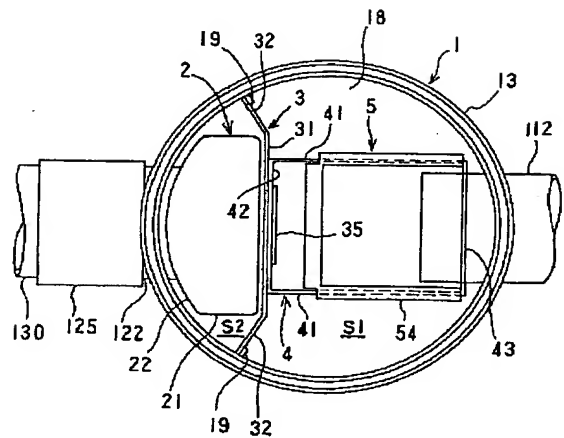
113 流入管の突出部

14

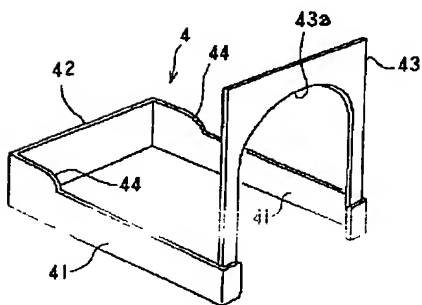
【図 1】



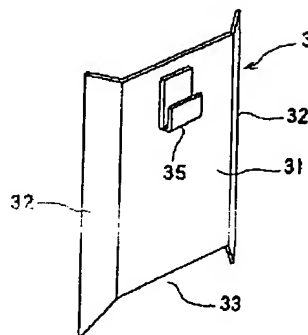
【図 2】



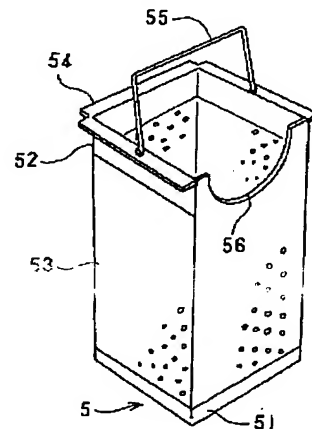
【図 3】



【図 4】



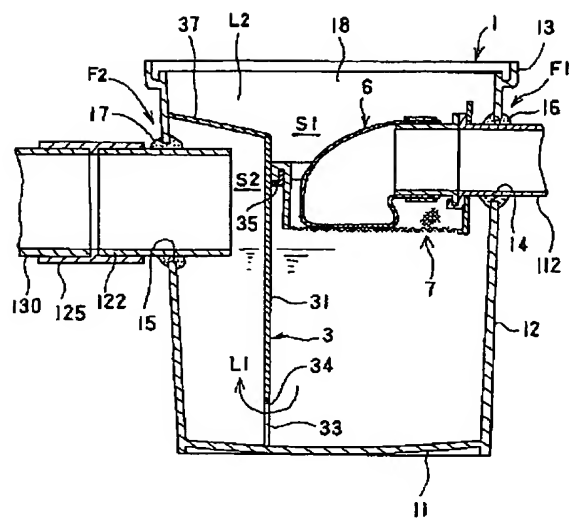
【図 5】







【图 1 3】



English Translation of

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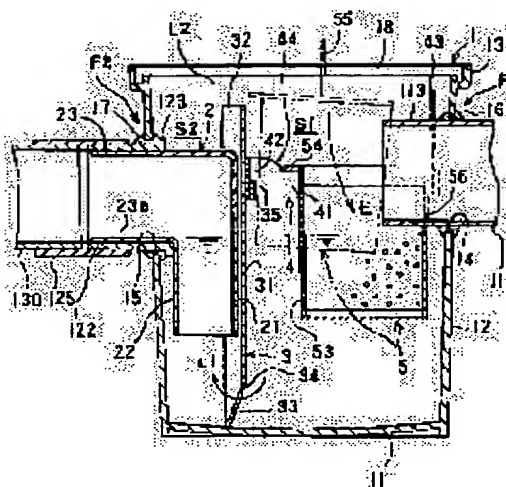
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## (54) CATCH BASIN FOR MISCELLANEOUS DRAINAGE

(57)Abstract:

PURPOSE: To simplify the fitting/removing operation of plural members used to display functions in a catch basin for miscellaneous drainage having the respective functions of solid (vegetable bits and the like) separation, oil separation and odor water-sealing.

CONSTITUTION: An oil separating plate 3, the shielding means (short pipe) 2 of a communicating passage L2, a supporting frame body 4 and a solid separating basket body 5 are provided removably from a catch basin body 1 having a drainage inflow part F1 and a drainage outflow part F2 in a lower position. Vegetable bits and hair mixed in miscellaneous drainage flowing in from an inflow pipe 112 are collected by the basket body 5. Water passing through the basket body 5 passes a by-pass passage L1 after oil separation and flows out through the short pipe 2. Odor is water-sealed by standing water in the short pipe 2.



## LEGAL STATUS

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## [Claim(s)]

[Claim 1] The low-ranking wastewater outflow section can take in and out of the Masumoto object through top-face opening of the Masumoto object of the owner bottom established in the drum wall, and the Masumoto object rather than the wastewater inflow section and its wastewater inflow section. Spacing The arm section of the separated pair The housing object which has the lifting-and-holding rod part of the portal which can engage and release the lobe of the inhalant canal which was prepared in the point of this arm section and was projected from the wastewater inflow section of the Masumoto object in that building envelope on the top face, is made to carry out the lifting and holding of the above-mentioned lifting-and-holding rod part to the lobe of the above-mentioned inhalant canal at least, and is arranged in the building envelope of the Masumoto object, Insert and remove are possible between the arm sections of the pair of the above-mentioned housing object arranged through top-face opening of the Masumoto object in the building envelope, and lifting and holding are possible by the housing object. The reentrant it can detach [ reentrant ] towards meeting [ one place of the perimeter wall upper limit section ] the inferior surface of tongue of the lobe at the lobe of the above-mentioned inhalant canal possesses. The catch basin for wastes characterized by having the basket object equipped with the water flow nature used as the acceptance posture of the waste which flows from the above-mentioned inhalant canal by fitting the above-mentioned reentrant into the above-mentioned lobe while carrying out lifting and holding with the above-mentioned housing object for solid separation.

[Claim 2] Top-face opening of the Masumoto object of the owner bottom where the low-ranking wastewater outflow section was prepared in the drum wall rather than the wastewater inflow section and its wastewater inflow section, and the Masumoto object can be taken in and out of the Masumoto object of a through lever. While being fixed possible [ balking ] inside the Masumoto object and dividing the building envelope to the primary space by the side of the above-mentioned wastewater inflow section, and the secondary space by the side of the wastewater outflow section The oil-separation plate which equips the lower limit section with opening used as the detour of wastewater, and top-face opening of the Masumoto object can be taken in and out of the Masumoto object of a through lever. It can take in and out of the above-mentioned primary space through an electric shielding means to cover the free passage way which opens for free passage the primary space divided with the above-mentioned oil-separation plate, and secondary space in the upper part of an oil-separation plate, and top-face opening of the Masumoto object. Spacing The arm

section of the separated pair The housing object which has the lifting-and-holding rod part of the portal which can engage and release the top face of the lobe of the inhalant canal which was prepared in the point of this arm section and was projected from the wastewater inflow section of the Masumoto object in the above-mentioned primary space, is made to carry out the lifting and holding of the above-mentioned lifting-and-holding rod part to the lobe of the above-mentioned inhalant canal at least, and is arranged in the building envelope of the Masumoto object, Insert and remove are possible between the arm sections of the pair of the above-mentioned housing object arranged through top-face opening of the Masumoto object in the building envelope, and lifting and holding are possible by the housing object. The reentrant it can detach [ reentrant ] towards meeting [ one place of the perimeter wall upper limit section ] the inferior surface of tongue of the lobe at the lobe of the above-mentioned inhalant canal possesses. The catch basin for wastes characterized by having the basket object equipped with the water flow nature used as the acceptance posture of the waste which flows from the above-mentioned inhalant canal by fitting the above-mentioned reentrant into the above-mentioned lobe while carrying out lifting and holding with the above-mentioned housing object for solid separation.

[Claim 3] The catch basin for wastes according to claim 2 with which the above-mentioned connection rod part of a housing object is made by the above-mentioned engagement implement of this oil-separation plate that the engagement implement was formed in the plate surface of an oil-separation plate, and was fixed inside the Masumoto object while the housing object was equipped with the connection rod part covering between [ of the arm section of a pair ] the end face sections as engaging and releasing is possible in the vertical direction.

[Claim 4] Top-face opening of the Masumoto object of the owner bottom where the low-ranking wastewater outflow section was prepared in the drum wall rather than the wastewater inflow section and its wastewater inflow section, and the Masumoto object can be taken in and out of the Masumoto object of a through lever. While being fixed possible [ balking ] inside the Masumoto object and dividing the building envelope to the primary space by the side of the above-mentioned wastewater inflow section, and the secondary space by the side of the wastewater outflow section The oil-separation plate which equips the lower limit section with opening used as the detour of wastewater, and top-face opening of the Masumoto object can be taken in and out of the Masumoto object of a through lever. It can take in and out of the above-mentioned primary space through an electric shielding means to cover the free passage

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way which opens for free passage the primary space divided with the above-mentioned oil-separation plate, and secondary space in the upper part of an oil-separation plate, and top-face opening of the Masumoto object. The catch basin for wastes characterized by having the flexible bag body equipped with the water flow nature attached in the above-mentioned primary space possible [ balking ] at the lobe of the inhalant canal projected from the wastewater inflow section for solid separation.

[Claim 5] An electric shielding means can take top-face opening of the Masumoto object in and out of the Masumoto object of a through lever. The catch basin for wastes given in claim 2 which becomes with the short pipe of the L form arranged downward in the height location between the upper limb of opening of the oil-separation plate, and the outlet margo inferior of the wastewater outflow section in the secondary space where the end section was connected to the wastewater outflow section, and the other end was divided with the oil-separation plate, claim 3, or claim 4.

[Claim 6] The catch basin for wastes given in claim 2 which an electric shielding means becomes by lock out Itabe who takes up the secondary space which was established in the oil-separation plate and divided with this oil-separation plate in that upper part, claim 3, or claim 4.

#### [Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the catch basin for wastes equipped with the isolation of a sewage-from-homes underwater oil, or the water seal function of a downstream odor besides the isolation of solids, such as vegetable waste mixed with the catch basin for wastes, especially the waste, and hair.

[0002]

[Description of the Prior Art] In the catch basin for wastes laid underground and installed in housing site, by what gave the function to separate solids which flow with a waste, such as vegetable waste and hair, generally, a solid is caught with the mesh basket made to attend the outlet side edge of an inhalant canal, and the method of passing the mesh of a mesh basket is adopted in wastewater.

Moreover, in what gave the isolation of a sewage-from-homes underwater oil, an oil-separation plate is arranged to the interior of a catch basin, and the method of detouring a waste through opening which the lower limit section of this oil-separation plate was made possessing is adopted. Furthermore, in what gave the water seal function of a downstream odor, the method of maintaining at the condition of having installed the water seal plate in the interior of a catch basin, and having divided the building envelope of a catch basin to upstream space and downstream space

with this water seal plate, and having sealed downstream space to upstream space is adopted.

[0003] By the way, as for the catch basin for wastes, it is desirable that it is as small as possible at relation with the installation tooth space. Moreover, it sets to the catch basin equipped with solid isolation, the catch basin having three functions, solid isolation, an oil-separation function, and an odor water seal function, etc. Since it is required to discard the solid which carried out uptake with the mesh basket, to wash a mesh basket, an oil-separation plate, a water seal plate, etc., or to clean the interior of a catch basin, it is desirable that all of a mesh basket, an oil-separation plate, a water seal plate, etc. can be easily taken out now from a catch basin by easy actuation.

[0004]

[Problem(s) to be Solved by the Invention] However, as described above, a catch basin can seldom enlarge the aperture and magnitude by relation with the installation tooth space in many cases. Therefore, in the catch basin equipped with solid isolation, and the conventional catch basin for wastes having three functions, solid isolation, an oil-separation function, and an odor water seal function, since neither receipts and payments of a mesh basket, nor an oil-separation plate, a water seal plate, etc. could be taken in and out easily, it was not necessarily what may satisfy the above-mentioned request.

[0005] devising a device to the attachment structure to the Masumoto objects, such as a member used for the water seal of members, such as a mesh basket which this invention is made in view of the above situation, and is used for solid separation, an oil-separation plate, and an odor,, even if the building envelope of a catch basin is narrow By easy actuation, members, such as the above-mentioned mesh basket, an oil-separation plate, the member used for the water seal of an odor can be taken in and out of the Masumoto object easily, and can be detached and attached, and it aims at offering the catch basin for wastes which can moreover demonstrate certainly each function, such as solid separation, oil separation, and odor water seal.

[0006]

[Means for Solving the Problem] The catch basin for wastes concerning the configuration indicated to claim 1 The low-ranking wastewater outflow section can take in and out of the Masumoto object through top-face opening of the Masumoto object of the owner bottom established in the drum wall, and the Masumoto object rather than the wastewater inflow section and its wastewater inflow section. Spacing The arm section of the separated pair The housing object which has the lifting-and-holding rod part of the portal which can engage and release the top face of the lobe of the inhalant canal which was prepared in the point of this arm section and

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was projected from the wastewater inflow section of the Masumoto object in that building envelope, is made to carry out the lifting and holding of the above-mentioned lifting-and-holding rod part to the lobe of the above-mentioned inhalant canal at least, and is arranged in the building envelope of the Masumoto object, Insert and remove are possible between the arm sections of the pair of the above-mentioned housing object arranged through top-face opening of the Masumoto object in the building envelope, and lifting and holding are possible by the housing object. The reentrant it can detach [ reentrant ] towards meeting [ one place of the perimeter wall upper limit section ] the inferior surface of tongue of the lobe at the lobe of the above-mentioned inhalant canal possesses. While carrying out lifting and holding with the above-mentioned housing object, it has the basket object equipped with the water flow nature used as the acceptance posture of the waste which flows from the above-mentioned inhalant canal by fitting the above-mentioned reentrant into the above-mentioned lobe for solid separation. The catch basin for wastes concerning the configuration indicated to claim 2 Top-face opening of the Masumoto object of the owner bottom where the low-ranking wastewater outflow section was prepared in the drum wall rather than the wastewater inflow section and its wastewater inflow section, and the Masumoto object can be taken in and out of the Masumoto object of a through lever. While being fixed possible [ balking ] inside the Masumoto object and dividing the building envelope to the primary space by the side of the above-mentioned wastewater inflow section, and the secondary space by the side of the wastewater outflow section The oil-separation plate which equips the lower limit section with opening used as the detour of wastewater, and top-face opening of the Masumoto object can be taken in and out of the Masumoto object of a through lever. It can take in and out of the above-mentioned primary space through an electric shielding means to cover the free passage way which opens for free passage the primary space divided with the above-mentioned oil-separation plate, and secondary space in the upper part of an oil-separation plate, and top-face opening of the Masumoto object. Spacing The arm section of the separated pair The housing object which has the lifting-and-holding rod part of the portal which can engage and release the top face of the lobe of the inhalant canal which was prepared in the point of this arm section and was projected from the wastewater inflow section of the Masumoto object in the above-mentioned primary space, is made to carry out the lifting and holding of the above-mentioned lifting-and-holding rod part to the lobe of the above-mentioned inhalant canal at least, and is arranged in the building envelope of the

Masumoto object, Insert and remove are possible between the arm sections of the pair of the above-mentioned housing object arranged through top-face opening of the Masumoto object in the building envelope, and lifting and holding are possible by the housing object. The reentrant it can detach [ reentrant ] towards meeting [ one place of the perimeter wall upper limit section ] the inferior surface of tongue of the lobe at the lobe of the above-mentioned inhalant canal possesses. While carrying out lifting and holding with the above-mentioned housing object, it has the basket object equipped with the water flow nature used as the acceptance posture of the waste which flows from the above-mentioned inhalant canal by fitting the above-mentioned reentrant into the above-mentioned lobe for solid separation.

[0007] In the catch basin for wastewater concerning the configuration indicated to claim 2 As indicated to claim 3, while a housing object is equipped with the connection rod part covering between [ of the arm section of a pair ] the end face sections An engagement implement is formed in the plate surface of an oil-separation plate, and the configuration that the above-mentioned connection rod part of a housing object is made as engaging and releasing is possible in the vertical direction can be adopted as the above-mentioned engagement implement of this oil-separation plate fixed inside the Masumoto object.

[0008] The catch basin for wastes concerning the configuration indicated to claim 4 Top-face opening of the Masumoto object of the owner bottom where the low-ranking wastewater outflow section was prepared in the drum wall rather than the wastewater inflow section and its wastewater inflow section, and the Masumoto object can be taken in and out of the Masumoto object of a through lever. While being fixed possible [ balking ] inside the Masumoto object and dividing the building envelope to the primary space by the side of the above-mentioned wastewater inflow section, and the secondary space by the side of the wastewater outflow section The oil-separation plate which equips the lower limit section with opening used as the detour of wastewater, and top-face opening of the Masumoto object can be taken in and out of the Masumoto object of a through lever. It can take in and out of the above-mentioned primary space through an electric shielding means to cover the free passage way which opens for free passage the primary space divided with the above-mentioned oil-separation plate, and secondary space in the upper part of an oil-separation plate, and top-face opening of the Masumoto object. It has the flexible bag body equipped with the water flow nature attached in the above-mentioned primary space possible [ balking ] at the lobe of the inhalant canal projected from the wastewater inflow section for

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solid separation.

[0009] In the catch basin for wastes concerning the configuration indicated to claim 2, claim 3, or claim 4 As indicated to claim 5, an electric shielding means can take top-face opening of the Masumoto object in and out of the Masumoto object of a through lever. Become with the short pipe of the L form arranged downward in the height location between the upper limb of opening of the oil-separation plate, and the outlet margo inferior of the wastewater outflow section in the secondary space where the end section was connected to the wastewater outflow section, and the other end was divided with the oil-separation plate. It is possible to adopt the configuration to say, and as indicated to claim 6, it is also possible to adopt the configuration that an electric shielding means becomes by lock out Itabe who takes up the secondary space which was established in the oil-separation plate and divided with this oil-separation plate in that upper part.

[0010]

[Function] In the catch basin for wastes concerning the configuration indicated to claim 1 A housing object and a basket object can be taken in and out of the Masumoto object through the top-face opening. And it is possible to make a housing object engage with the top face of the lobe of an inhalant canal using the lifting-and-holding rod part of the portal, and to arrange in the building envelope of the Masumoto object. Since it is possible to carry out fitting of the reentrant of the basket object to the above-mentioned lobe, and to consider as the acceptance posture of a waste by moving the basket object inserted between the arm sections of the pair of the housing object from the top towards meeting the inferior surface of tongue of the lobe of an inhalant canal The Masumoto object can be easily equipped with a housing object or a basket object by easy actuation. What is necessary is just to perform a procedure contrary to the above-mentioned procedure, when picking out a housing object and a basket object from the Masumoto object.

[0011] In the catch basin for wastes concerning the configuration indicated to claim 2, a housing object and a basket object can be taken in and out of the Masumoto object in the same procedure as the place mentioned above, or it can detach and attach. Moreover, an oil-separation plate and an electric shielding means can be taken in and out of the Masumoto object through top-face opening of the Masumoto object. A housing object and a basket object can be taken in and out of the primary space divided with the oil-separation plate through top-face opening of the Masumoto object. Since the oil-separation plate has composition fixed possible [ balking ] inside the Masumoto object, the housing object has composition fixed possible [ balking ] in the above-mentioned primary space and the basket

object has composition the lifting and holding of the pull-up of are made possible with the above-mentioned housing object An oil-separation plate, an electric shielding means, a housing object, a basket object, etc. can be easily taken in and out of the Masumoto object by easy actuation, or it can detach and attach on the Masumoto object.

[0012] And if it is constituted as the housing object and the basket object indicated to claim 3, since a housing object is fixed to the Masumoto object side, it is not necessary to prepare a special fastener.

[0013] In the catch basin for wastes concerning the configuration indicated to claim 4, since the flexible bag body attached in the interior of the Masumoto object at the lobe of the inhalant canal which projected to the primary space divided with an electric shielding means, an oil-separation plate, and this oil-separation plate is only prepared, it is easy to make the catch basin concerned small.

[0014] In each catch basin for wastes concerning this invention constituted as mentioned above, since uptake of the solids which flow with a waste with a basket object or a bag body, such as vegetable waste and hair, is carried out, the oil mixed with the waste is separated by the specific gravity difference with water, primary space collects and it appears on the surface of water, the situation of flowing to the downstream does not happen. Moreover, since the free passage way which opens primary space and secondary space for free passage in the upper part of an oil-separation plate by lock out Itabe prepared in the short pipe or oil-separation plate of L form is interrupted, the Masumoto object collects, water seal is carried out [ odor / of the downstream ] bywater, and the situation where the odor flows backwards to the upstream does not happen.

[0015]

[Example] The sectional view of the catch basin for wastes according [ drawing 1 ] to the example of this invention and drawing 2 are the top view of this catch basin, and an outline perspective view of a member by which drawing 3 - drawing 6 are used for the catch basin of drawing 1 .

[0016] The Masumoto object 1 is fabricated with synthetic resin, such as polypropylene and a polyvinyl chloride, one is equipped with a bottom wall 11, the drum wall 12 of a \*\*\*\* top flare configuration, and the annular slot 13, and a slot 13 is used as a fitting slot of the tubed adjuster for burial-depth accommodation (un-illustrating) accumulated on the Masumoto object 1, or is used as a lid receptacle slot for equipping with a lid (un-illustrating). This Masumoto object 1 is laid underground and installed in the earth. Moreover, it is established by two places from which the circular openings 14 and 15 differ in the above-mentioned drum wall 12 according to the burial depth of upstream piping or downstream piping, and each opening edge of these openings 14

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and 15 is equipped with sealants 16 and 17.

[0017] And the wastewater inflow section F1 is formed of the above-mentioned opening 14 equipped with the sealant 16. The inhalant canal 112 which forms the trailer of upstream piping is connected to the wastewater inflow section F1. The inhalant canal 112 is projected for a while in the building envelope of the Masumoto object 1, in order to make it not escape from the drum wall 12 of the Masumoto object 1, even if telescopic motion, deformation, etc. arise, in order to ensure connection with the drum wall 12 of the Masumoto object 1, and it has shown the lobe with the sign 113.

[0018] Moreover, the wastewater outflow section F2 is formed by the above-mentioned opening 15 equipped with the sealant 17, the communication trunk 122 airtightly inserted in opening 15 through the sealant 17, and the short pipe 2 which was connected to this communication trunk 122 and which is mentioned later. The above-mentioned communication trunk 122 is inserted from the way towards the method of outside among the Masumoto objects 1 to the location where the flange 123 provided in the end section hits the above-mentioned sealant 17. It draws out and the communication trunk 122 which puts in this communication trunk 122 into that Masumoto object 1 through the top-face opening 18 of the Masumoto object 1, has inserted in opening 15 possible [ drawing ] through the sealant 17 from that condition, and was inserted in opening 15 in this way can also be taken out from the wastewater outflow section F2. Here, while the wastewater outflow section F2 is arranged by low order for a while rather than the wastewater inflow section F1, sufficient depth for a low-ranking part is secured from the wastewater outflow section F2 in the building envelope of the Masumoto object 1.

[0019] 2 is the short pipe of L form and is fabricated with synthetic resin, such as a polyvinyl chloride and polyethylene. This short pipe 2 is equipped with the abbreviation square tubed falling cylinder part 21 which has the front wall section 22 which curved so that the inside of the above-mentioned drum wall 12 of the Masumoto object 1 might be met, and the inferior surface of tongue opened wide, and the connection cylinder part 23 of the shape of tubing projected from the upper limit center section of the front wall section 22 in this falling cylinder part 21 like drawing 6. And after putting in this short pipe 2 into the Masumoto object 1 through the top-face opening 18 of the Masumoto object 1, that connection cylinder part 23 (namely, end section of a short pipe 2) is airtightly inserted in the above-mentioned communication trunk 122. Therefore, the connection cylinder part 23 is drawn out from the above-mentioned communication trunk 122, and this short pipe 2 can also be taken out through the top-face opening 18 of the

Masumoto object 1.

[0020] 3 is an oil-separation plate. As shown in drawing 4, the oil-separation plate 3 has the opening 33 of the shape of a reentrant formed by making a part of whole lower limit section of the monotonous section 31, and lower limit section of the cam-plate sections 32 and 32 remove while having in one the narrow cam-plate sections 32 and 32 formed in the both sides of the monotonous section 31 of back quantity, and this monotonous section 31 by being crooked, respectively. As shown in drawing 2, it is being fixed inside the Masumoto object 1 by [ of engagement projection 19 -- prepared for the proper place of the hoop direction of the drum wall 12 (refer to drawing 1) in the Masumoto object 1 ] making the edge of the above-mentioned cam-plate sections 32 and 32 fitted in and engaged mutually, while top-face opening of the Masumoto object 1 is inserted in this oil-separation plate 3 by the Masumoto object 1 of a through lever. In this way, the oil-separation plate 3 fixed inside the Masumoto object 1 forms the detour (the arrow head L1 has shown) with which the opening 33 of the lower limit section opens the primary space S1 and the secondary space S2 for free passage while dividing the building envelope of the Masumoto object 1 to the primary space S1 by the side of the wastewater inflow section F1, and the secondary space S2 by the side of the wastewater outflow section F2. Since it secedes from above-mentioned engagement projection 19 -- by pulling up up, this oil-separation plate 3 can be taken out outside through the top-face opening 18 of the Masumoto object 1, if it raises up as it is.

[0021] In the above-mentioned short pipe 2, the lower limit section (namely, other end of a short pipe 2) by which that falling cylinder part 21 is opened wide is arranged downward in the above-mentioned secondary space S2 in the height location between the upper limb 34 of the opening 33 of the oil-separation plate 3, and the outlet margo inferior (at this example, at least the minimum of the connection cylinder part 23 in a short pipe 2 is section 23a) of the wastewater outflow section F2.

[0022] As shown in drawing 1 or drawing 4, the engagement implement 35 of an abbreviation U typeface thru/or J typeface has fixed in the part near the upper limit of the plate surface of the monotonous section 31 in the oil-separation plate 3.

[0023] 4 is a housing object. As shown in drawing 3, this housing object 4 is equipped with the lifting-and-holding rod part 43 of the portal started so that it might continue between [ of the arm sections 41 and 41 of the shape of an parallel piece of a plate of a pair which separated spacing, the connection rod part 42 of the shape of a piece of a plate covering between / of these arm sections 41 and 41 / the end face sections, and the above-mentioned arm sections 41 and 41 of a pair ]

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points, and inner circumference marginal 43a of the lifting-and-holding rod part 43 has an inverted-U character form. In this example, although the arm sections 41 and 41 and the connection rod part 42 are a right angle, these both may be made into U typeface. this housing object 4 -- the top-face opening 18 of the Masumoto object 1 -- letting it pass -- top Norikazu -- it is stopped in the shape of fitting by the top face of the lobe 113 of an inhalant canal 112 where it was put in in degree space S1, and engaged with the above-mentioned engagement implement 35 which that connection rod part 42 has fixed to the oil-separation plate 3, and the lifting-and-holding rod part 43 of a portal was projected from the wastewater inflow section F1. pulling up the lifting-and-holding rod part 43 of a portal from the lobe 113 of the above-mentioned inhalant canal 112 at the same time it removes the connection rod part 42 from the engagement implement 35 by pulling up such a housing object 4 up -- it can remove and it is possible to take out outside through the top-face opening 18 of the Masumoto object 1 as it is.

[0024] 5 is a basket object. the hole of the product [ frames / 51 and 52 / by which this basket object 5 was made from stainless steel ] made from stainless steel -- it has the solid uptake container 53 of the cube type which stretched the member which has water flow nature, such as an empty plate and a network made from stainless steel, and was constituted by the cube type, the flange 54 prepared in three sides of the upper limit section of this container 53, and the handle 55. And the radii-like reentrant 56 possesses in the upper limit section of one side face without the flange of a container 53. After inserting this basket object 5, leaning a container 53 among the arm sections 41 and 41 of the pair of the housing object 4 as an arrow head E shows after being put in from the top-face opening 18 of the Masumoto object 1, as the imaginary line showed to drawing 1, it lets a flange 54 slide in the direction which meets the inferior surface of tongue of the lobe 113 of an inhalant canal 112 on the arm sections 41 and 41, and fitting of the reentrant 56 is carried out to the inferior surface of tongue of that lobe 113. By this, a flange 54 is constructed over the arm sections 41 and 41 of the pair of the housing object 4, the lifting and holding of the basket object 5 are carried out with the housing object 4, and a basket object 5 attends the wastewater inflow section F1, and serves as an acceptance posture of a waste. If it does in this way, even if the building envelope or the primary space S1 of the Masumoto object 1 is narrow, reasonable, a basket object 5 can be put into the Masumoto object 1, and can be installed. It is possible for this basket object 5 to have a handle 55 by hand, to secede from the housing object 4 by removing and pulling up that hollow 56 from the lobe 113 of the above-mentioned inhalant canal 112,

and to take out through the top-face opening 18 of the Masumoto object 1 as it is.

[0025] In this example, the step 44 which projected upward is formed in the base of the arm sections 41 and 41 of the pair of the housing object 4, and the flange 54 of the basket object 5 constructed over the arm sections 41 and 41 is caught in this step 44. For this reason, even if the waste with which the solid was mixed with the basket object 5 flows down, that basket object 5 does not retreat and a waste surely flows in a basket object 5.

[0026] In the catch basin for wastes constituted as mentioned above, after the waste which has flowed from the inhalant canal 112 enters into a basket object 5, while uptake of the solids mixed with it, such as vegetable waste and hair, is carried out to the container 53 for solid uptake of a basket object 5, water passes the container 53 and flows into the primary space S1. And if water continues flowing into the primary space S1, it will go into the secondary space S2 through the detour L1 in which the water is formed of the opening 33 of the oil-separation plate 3, and the water level will go up gradually. And if the water level of the secondary space S2 becomes higher than the outlet margo inferior (at least the minimum of the connection cylinder part 23 in a short pipe 2 is section 23a) of the wastewater outflow section F2, it will flow out until the water level of the secondary space S2 falls rather than the outlet margo inferior of the wastewater outflow section F2 through the excurrent canal 130 by which the water is connected to the downstream. After the water level of the secondary space S2 fell rather than the outlet margo inferior of the wastewater outflow section F2 and the outflow of water has stopped, water remains collecting into the falling cylinder part 21 of a short pipe 2. For this reason, the building envelope of a short pipe 2 turns into a closed space. In other words, when the falling cylinder part 21 of a short pipe 2 has sunk into underwater [ of the secondary space S2 ], the free passage way L2 which opens the primary space S1 and the secondary space S2 for free passage in the upper part of the oil-separation plate 3 is intercepted. Therefore, it is serving as an electric shielding means by which a short pipe 2 interrupts the above-mentioned free passage way L2 of the upper part of the oil-separation plate 3, in this example. And water seal of the odor of the downstream is carried out inside a short pipe 2, and the odor does not flow backwards through the primary space S1, the secondary space S2, or an inhalant canal 112.

[0027] Moreover, the oil mixed with the waste which flowed from the inhalant canal 112 comes floating to the water surface according to a specific gravity difference with water. For this reason, it is covered with the oil-separation plate 3, and appears and separates into the water surface by

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the primary space S1 side, and oil does not flow into the secondary space S2 side.

[0028] After the solid which carried out uptake with the basket object 5 pulls up a basket object 5 outside through the top-face opening 18 of the Masumoto object 1, it is processed. Moreover, since a basket object 5, the housing object 4, the oil-separation plate 3, a short pipe 2, a communication trunk 122, etc. can be removed one after another in this order and can be taken out from the top-face opening 18 of the Masumoto object 1 outside, it is made such and they can rinse them. moreover, supra -- it is also possible to remove all the basket objects 5 etc. picking the bottom, and to clean the Masumoto object 1.

[0029] As opposed to the lobe 113 of an inhalant canal 112 projecting and having raised the connection dependability of a drum wall 12 and its inhalant canal 112 to the 1 side of the drum wall 112 in the building envelope in such a catch basin for wastes since the oil-separation plate 3 etc. is being fixed to the opposite side of the lobe 113, the space which space required for a lobe 113 to carry out until insertion of the basket object 5 caudad is narrow, and needs it to fix the housing object 4 further is also narrow, also although kicked As described above, form the lifting-and-holding rod part 43 of a portal in the housing object 4, and the lifting and holding of the lifting-and-holding rod part 43 are carried out to it by the lobe 113 of an inhalant canal 112. Form a reentrant 56 in a basket object 5, and it enables it to carry out fitting (insertion) of the reentrant 56, without being interfered by the lobe 113. And since it was made for the edge of a lobe 113 to be located in the center of a basket object 5 when fitting (insertion) of the reentrant 56 was carried out to a lobe 113, even if the building envelope of the Masumoto object 1 was narrow, it became possible to take the housing object 4 and a basket object 5 in and out easily.

[0030] By the way, a short pipe 2 is made to bear the water seal function of a downstream odor, and the oil-separation plate 3 is made to have borne the oil-separation function by forming a short pipe 2 independently [ the oil-separation plate 3 ] in this example. Thus, Lycium chinense is useful when oil-separation function sufficient in the submersion depth which the submersion depth of the falling cylinder part 22 of the short pipe 2 which bears a water seal function with local regulations etc. is set to the range fewer than the fixed depth, and was moreover defined such is not demonstrated.

[0031] Drawing 7 shows other examples. In this example, lock out Itabe 37 is formed in the upper limit section of the oil-separation plate 3, and this lock out Itabe's 37 edge 37a is airtightly contacted to the inside of the drum wall 12 in the Masumoto object 1. Thus, if it sets, since the upper part of the secondary space S2 divided with the oil-separation plate 3 will be closed by lock out Itabe 37, a

downstream odor does not flow backwards to the primary space S1 side. For this reason, the short pipe 2 of the L form which will demonstrate not only an oil-separation function but the water seal function of an odor, and was explained by drawing 1 etc. has the unnecessary oil-separation plate 3. Therefore, in this example, a socket 123 is inserted in the opening 15 equipped with the sealant 17, and the excurrent canal 130 is connected to this socket 123 through the joint 125. Since other configurations and operations are the same as that of the place mentioned above with reference to drawing 1 etc., in drawing 7, the same sign is given to the part explained by drawing 1 - drawing 6 thru/or the same as that of a member or the \*\*\*\*ing part, or a member, and detailed explanation is omitted.

[0032] Drawing 8 shows the modification of the housing object 4. This housing object 4 starts to each of the end face section of the arm sections 41 and 41 of the pair which separated spacing, and starts rod parts 45 and 45, the horizontal lever 46 is constructed across horizontally between [ of these standup rod parts 45 and 45 ] the upper limit sections, the pieces 47 and 47 of engagement are formed downward in each of the both ends of this horizontal lever 46, and the connection rod part 42 for reinforcement is formed if needed. In addition, the horizontal lever 46 is omitted, and it starts and you may make it curve the piece of engagement to the upper limit of rod parts 45 and 45. Since other configurations are the same as the housing object 4 explained by drawing 3, the same sign has been given to the same part.

[0033] Also in such a housing object 4, it can take through the top-face opening 18 of the Masumoto object 1. and drawing 9 -- like -- the top-face opening 18 of the Masumoto object 1 -- letting it pass -- top Norikazu -- it is stopped by inside edge 13a in which the pieces 47 and 47 of engagement of the housing object 4 into which it was put in degree space S1 form the annular slot 13 by the side of the Masumoto object 1, and the lifting-and-holding rod part 43 of a portal is stopped by the top face of the lobe 113 of an inhalant canal 112 in the shape of fitting. In this way, if the housing object 4 is installed, since the pieces 47 and 47 of engagement are stopped by the above-mentioned circular inside edge 13a, even if a basket object 5 is back pushed with the waste which flows from an inhalant canal 112, the housing object 4 does not move forward and backward (longitudinal direction of drawing 9). [0034] pulling up the lifting-and-holding rod part 43 of a portal from the lobe 113 of the above-mentioned inhalant canal 112 at the same time it removes the pieces 47 and 47 of engagement from inside edge 13a of a slot 13 by pulling up such a housing object 4 up -- it can remove and it is possible to take out outside through the top-face opening 18 of the Masumoto object 1 as it is. By

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using this housing object 4, it becomes unnecessary to form the engagement implement 35 in the oil-separation plate 3. It is also possible to use for a catch basin for wastes which explained this housing object 4 by drawing 1. About the procedure which pulls up the procedure for carrying out the lifting and holding of the basket object 5 to the housing object 4, and its basket object 5 from the housing object 4, and takes them out besides the Masumoto object 1, it is the same as that of the place explained by drawing 1 or drawing 7. In drawing 9, the same sign is given to the part explained by drawing 7 thru/or the same as that of a member or the \*\*\*\*ing part, or a member, and detailed explanation is omitted.

[0035] Drawing 10 is the sectional view of the catch basin for wastes of the example concerning another invention. It can replace with the basket object 5 which the housing object 4 and the engagement implement 35 which were explained by drawing 1 - drawing 7, drawing 8, drawing 9, etc. are unnecessary, and was explained by drawing 1 etc. in this example, and can take in and out of the primary space S1 through the top-face opening 18 of the Masumoto object 1. The flexible bag body 6 equipped with the water flow nature attached possible [balking] for solid separation is used for the lobe 113 of the inhalant canal 112 projected from the wastewater inflow section F1 in the above-mentioned primary space S1. The material which does not generate a toxic gas by incineration, for example, the thing made from the synthetic resin (polypropylene etc.) of a polyolefine system, can be suitably used for a bag body 6.

[0036] In this example, the barrel 62 which equipped the regio oralis 61 of a bag body 6 with the rectangular flange 63 is attached. Moreover, as shown in drawing 11, the rectangular flange 114 is formed in the edge of the lobe 113 of the above-mentioned inhalant canal 112. This flange 114 is equipped with piece of engagement 115 -- the lower side and the both-sides side on either side, if the flange 63 of the above-mentioned barrel 62 is inserted in these piece of engagement 115 -- from the upper part, flange 63, 114 comrades will overlap and a barrel 62 will be open for free passage to an inhalant canal 112. Therefore, if a flange 63 is pulled up with a bag body 6, it will secede from the flange 115 the flange 63 of whose is the other party.

[0037] In the constituted catch basin for wastes, thus, the waste which has flowed from the inhalant canal 112 After entering into a bag body 6, while uptake of the solids mixed with it, such as vegetable waste and hair, is carried out to a bag body 6 Water passes the bag body 6 and flows into the primary space S1, and the water goes into the secondary space S2 through the detour L1 currently formed of the opening 33 of the oil-separation plate 3, and flows out through the excurrent canal 130 connected to the downstream.

For this reason, the isolation of a solid, an oil-separation function, and the water seal function of an odor are demonstrated like what was explained by drawing 7 etc. The bag body 6 which carried out uptake of the solid is picked out from the Masumoto object 1, and can be incinerated with a solid. In addition, in drawing 8 or drawing 9, the same sign is given to the part explained by drawing 1 - drawing 6 thru/or the same as that of a member or the \*\*\*\*ing part, or a member, and detailed explanation is omitted. Moreover, a bag body 6 and a flange 63 may be unified.

[0038] Drawing 12 shows other examples of the structure of connecting an inhalant canal 112 and the regio oralis 61 of a bag body 6. That is, the thing of this drawing equips the barrel 64 equipped with the notching hole 65 of L typeface with the regio oralis 61 of a bag body 6, and forms the engagement projection 116 in the periphery of the lobe 113 of an inhalant canal 112. According to this example, after attaching the barrel 64 equipped with the regio oralis 61 of a bag body 6 outside the lobe 113 of an inhalant canal 112, a bag body 6 is connected to the lobe 113 of an inhalant canal 112 only by performing actuation of making it rotate for a while, and making it engaged so that it may not escape from the notching hole 65 of that barrel 64 to the engagement projection 116.

[0039] By the way, in the catch basin for wastes explained by drawing 10, since the bag body 6 linked to the lobe 113 of an inhalant canal 112 hangs down caudad, the solid by which the primary space S1 collects depending on the magnitude of a bag body 6, and uptake is carried out to water at a bag body 6 or it remains flooded. The catch basin for wastes effective in avoiding such a situation is shown in drawing 13. The mesh basket 7 which can be taken in and out of the primary space S1 is arranged in the top Norikazu degree space S1 through the top-face opening 18 of the Masumoto object 1, it collects and the bag body 6 which put on this mesh basket 7 is made to have supported in the high order rather than the water surface of water in the catch basin for wastes of this drawing. More specifically, the support location of the bag body 6 by the mesh basket 7 is set to the height location between the outlet margo inferior of the wastewater outflow section F2, and the inlet-port margo inferior (about the minimum of an inhalant canal 112 field) of the wastewater inflow section F1. And the following cure is taken as a concrete means for arranging a mesh basket 7 in the primary space S1. Namely, what stretched the network on the inferior surface of tongue of the housing object 4 explained by drawing 3 is used as a mesh basket 7. Moreover, while fixing the engagement implement 35 to the plate surface of the monotonous section 31 of the oil-separation plate 3 and making the connection rod part (it is equivalent to the connection rod part 42 explained by drawing 3) of a

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mesh basket 7 engage with the above-mentioned engagement implement 35. The lobe 113 of an inhalant canal 112 is made to have stopped the lifting-and-holding rod part (for it to be equivalent to the lifting-and-holding rod part 43 of a portal explained by drawing 3) of a portal in the shape of fitting. Thus, if it sets, since the solid by which the primary space S1 collects and uptake is carried out to water at the bag body 6 or the bag body 6 will not be flooded, it is sanitary. In addition, it is also possible to use what stretched the network for the inferior surface of tongue of the housing object 4 explained by drawing 8 as a mesh basket 7.

[0040] In drawing 13, the same sign is given to the part explained by drawing 1 - drawing 6 thru/or the same as that of a member or the \*\*\*\*ing part, or a member, and detailed explanation is omitted.

[0041]

[Effect of the Invention] According to the catch basin for wastes concerning this invention, even if the building envelope of the Masumoto object is narrow. Since all members, such as an oil-separation plate attached in the interior of the housing object prepared in the interior of the Masumoto object, a basket object, or the Masumoto object, an electric shielding means, a housing object, and a basket object (or bag body), can be easily detached and attached on the Masumoto object by easy actuation. It becomes possible to do easily the activity which washes or cleans the Masumoto objects and those members, or discards the solid which carried out uptake with the basket object. Nevertheless, it is effective in the isolation of a solid, an oil-separation function, and the water seal function of a downstream odor being demonstrated certainly.

#### [Brief Description of the Drawings]

[Drawing 1] It is the sectional view of the catch basin for wastes by the example of this invention.

[Drawing 2] It is the top view of the catch basin of drawing 1.

[Drawing 3] It is the outline perspective view of a housing object.

[Drawing 4] It is the outline perspective view of an oil-separation plate.

[Drawing 5] It is the outline perspective view of a basket object.

[Drawing 6] It is the outline perspective view of a

short pipe.

[Drawing 7] It is the sectional view of the catch basin for wastes by other examples.

[Drawing 8] It is the outline perspective view showing the modification of a housing object.

[Drawing 9] It is the sectional view of the catch basin for wastes using the housing object of drawing 8.

[Drawing 10] It is the sectional view of the catch basin for wastes by the example of another invention.

[Drawing 11] It is the outline perspective view showing the collar-head barrel for connecting an inhalant canal and the regio oralis of a bag body, and the flange of an inflow tubeside.

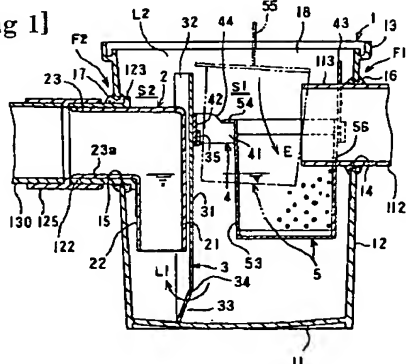
[Drawing 12] It is the explanatory view showing other examples for connecting an inhalant canal and the regio oralis of a bag body.

[Drawing 13] It is the sectional view of the catch basin for wastes by other examples of another invention.

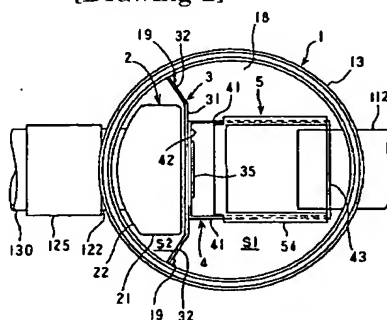
#### [Description of Notations]

- F1 Wastewater inflow section
- F2 Wastewater outflow section
- S1 Primary space
- S2 Secondary space
- L1 Detour
- L2 Free passage way
- 1 Masumoto Object
- 2 Short Pipe (Electric Shielding Means)
- 3 Oil-Separation Plate
- 4 Housing Object
- 5 Basket Object
- 6 Bag Body
- 7 Mesh Basket
- 12 Drum Wall
- 18 Top-Face Opening
- 33 Opening
- 35 Engagement Implement
- 37 Lock Out Itabe (Electric Shielding Means)
- 41 Arm Section
- 42 Connection Rod Part
- 43 Lifting-and-Holding Rod Part
- 53 Solid Uptake Container
- 112 Inhalant Canal
- 113 Lobe of Inhalant Canal

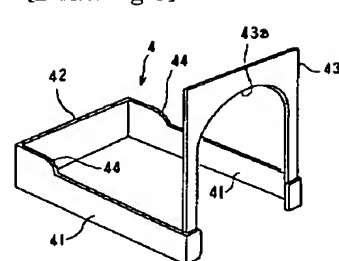
[Drawing 1]



[Drawing 2]

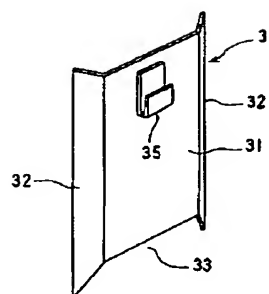


[Drawing 3]

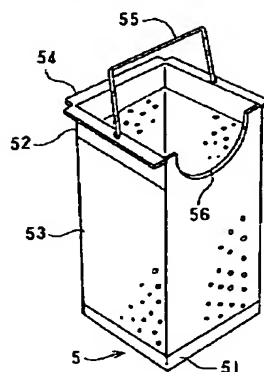


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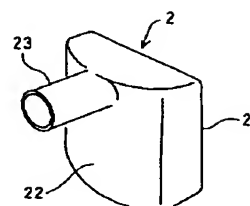
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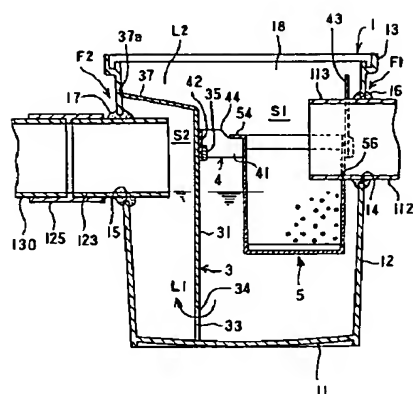
[Drawing 5]



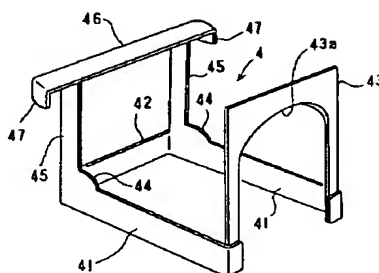
[Drawing 6]



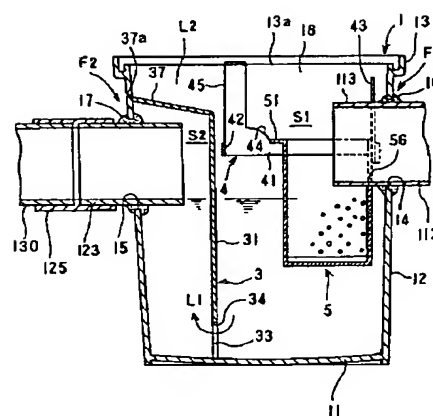
[Drawing 7]



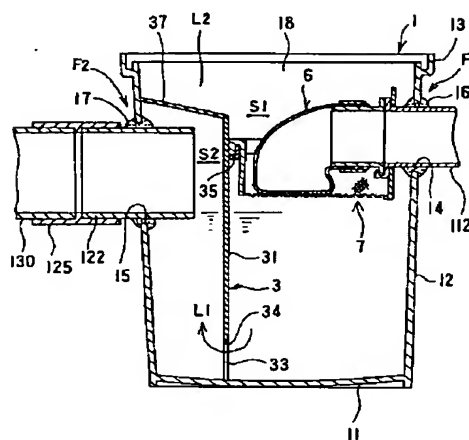
[Drawing 8]



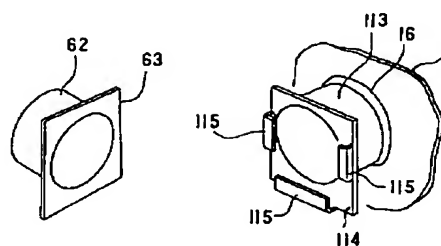
[Drawing 9]



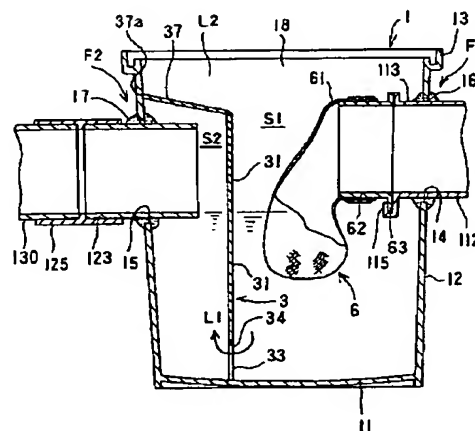
[Drawing 10]



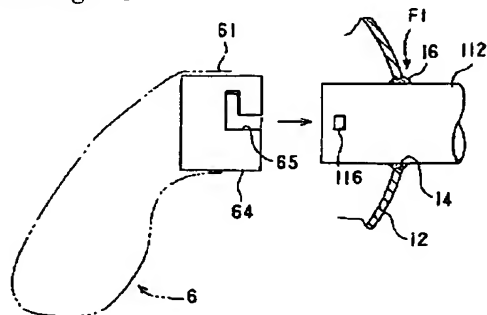
[Drawing 11]



[Drawing 13]



[Drawing 12]



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